

Asset health monitoring

Turning asset data into smarter, more efficient operations



What is asset health monitoring?

Asset health monitoring is the ongoing evaluation of asset condition, performance, and risk using both real-time and historical data. It enables organizations to detect early warning signs, understand performance trends, and make better-informed maintenance decisions.

Instead of reacting to failures, teams can adopt a proactive and predictive maintenance approach.

The challenge

Many organizations still rely on reactive or scheduled maintenance strategies. This can result in:

- Unexpected failures and operational downtime.
- Higher maintenance spend and inefficient resource allocation.
- Limited visibility into asset performance.
- Challenges prioritizing maintenance across complex asset portfolios.
- Increased safety and compliance exposure.

Without clear insight, decisions are often reactive and inconsistent.

How it works

Asset health monitoring brings together multiple capabilities:

- **Data collection.** Sensors, IoT devices, and operational systems capture asset data.
- **Integration.** Data is consolidated into a centralized platform such as ERP or EAM.
- **Analytics.** Advanced analytics and AI identify patterns, anomalies, and trends.
- **Visualization.** Dashboards provide clear, actionable insights.
- **Action.** Insights trigger alerts, workflows, and maintenance activities.

What it enables

By connecting asset data across systems, organizations gain a real-time view of asset condition. Key capabilities include:

- **Real-time monitoring.** Continuous tracking of asset performance.
- **Condition-based maintenance.** Maintenance driven by actual usage and wear.
- **Predictive insights.** Early identification of potential failures.
- **Risk-based prioritization.** Focus on the most critical assets.
- **Performance benchmarking.** Compare performance across sites and environments.

The business value

When implemented effectively, asset health monitoring delivers measurable results:

- **Reduced downtime.** Address issues before they lead to failure.
- **Lower maintenance costs.** Optimize servicing and resource use.
- **Extended asset life.** Maintain assets based on condition, not assumptions.
- **Improved safety.** Identify risks earlier and reduce hazards.
- **Better decision-making.** Use data to guide investment and maintenance strategies.

Where it delivers impact

Asset health monitoring is especially valuable in asset-intensive industries, including:

- Energy, utilities and resources.
- Manufacturing.
- Construction and engineering.
- Transport and logistics.

These industries depend on reliable, high-performing assets to maintain operations and profitability.

The role of modern platforms

Modern enterprise platforms like IFS Cloud bring asset health monitoring into a single connected environment. This allows organizations to:

- Link asset data directly to maintenance and operational workflows.
- Combine asset insights with financial, project, and supply chain data.
- Apply AI-driven insights to improve forecasting and planning.
- Support field teams with real-time, mobile access to information.

Why it matters now

As organizations face growing pressure to improve efficiency, control costs, and meet sustainability goals, asset health monitoring becomes a practical foundation for smarter operations. It provides the visibility and control needed to operate with confidence, shifting maintenance from reactive to data-driven.